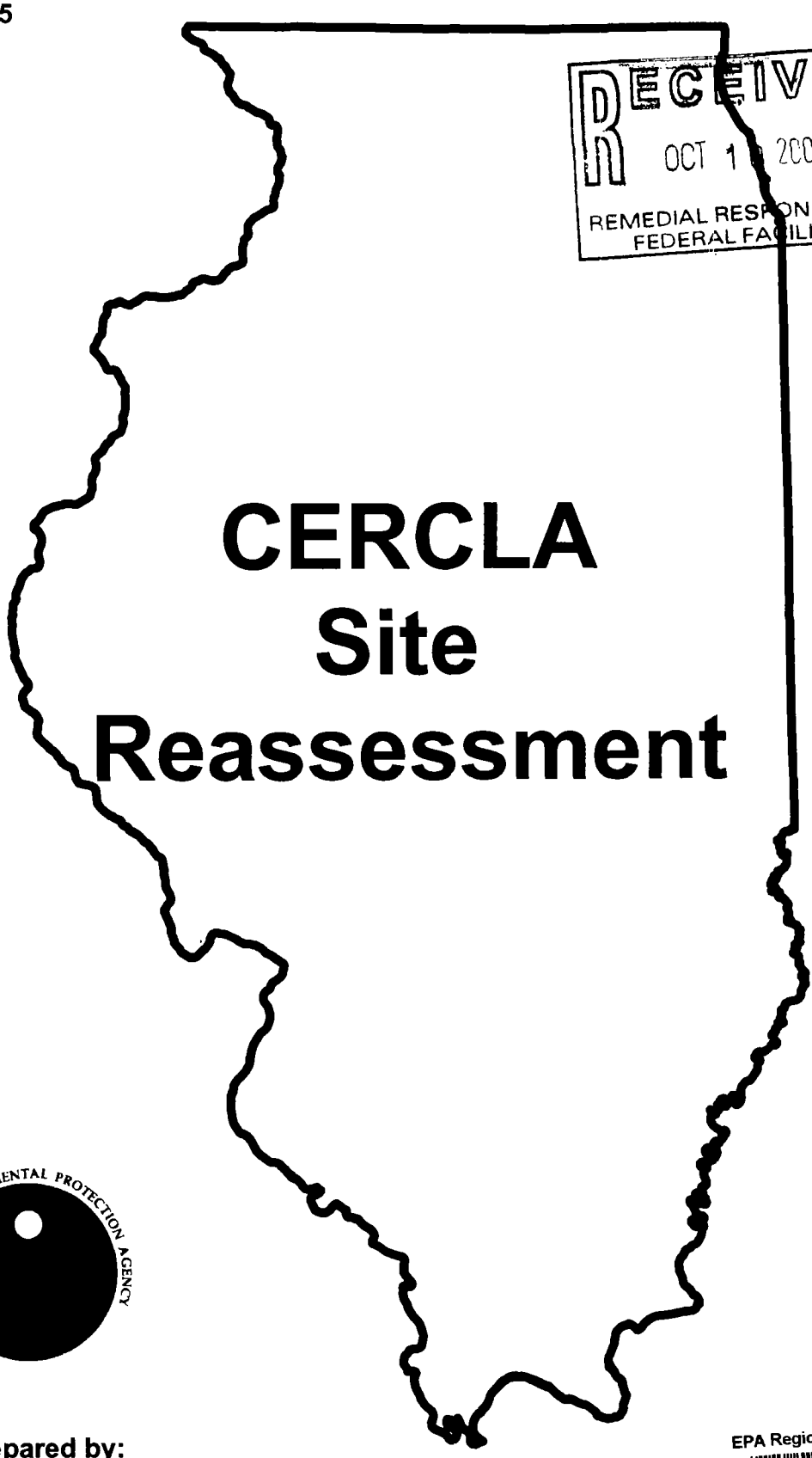
LPC# 031 608 5749 Cook County
People's Gas, Light, and Coke North Station
ILD# 982074775
SF/Tech



CERCLA Site Reassessment

Prepared by:
Office of Site Evaluation
Division of Remediation Management
Bureau of Land

CERCLA Site Reassessment

For:

People's Gas, light, and Coke – North Station
Cook County, Chicago, IL
ILD# 982074775

PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
DIVISION OF REMEDIATION MANAGEMENT
OFFICE OF SITE EVALUATION

SEPTEMBER 2007

Regional EPA Reviewer: Erica Islas Erica Islas 3/31/2008

TABLE OF CONTENTS

APPENDICES

Section 1.0 Introduction

On April 11, 2007, the Illinois Environmental Protection Agency's (Illinois EPA) Office of Site Evaluation was tasked by the Region V Offices of the United States Environmental Protection Agency (U.S. EPA) to conduct a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Site Reassessment at the previous location of the People's Gas North Station coal gasification site at the corner of Crosby and Hobbie Street, Chicago, Illinois.

Current U.S. EPA policy stipulates that a Site Reassessment be conducted to determine the current status of the People's Gas North Station Manufactured Gas Plant Site (North Station MGP). This site reassessment will consist of an evaluation of recent information to determine if further Superfund investigation is warranted. The reassessment will supplement previous assessment work, and is not intended to replace previous CERCLA assessment activities.

The Site Reassessment is designed to provide necessary information that will help determine if the site qualifies for possible inclusion on the National Priorities List, or should receive a No Further Remedial Action Planned (NFRAP) designation. At the end of the reassessment process the author will recommend that the site may be given a NFRAP designation, receive further Superfund investigation, or referred to another state or federal clean-up program. The site reassessment is performed under the authority of CERCLA commonly known as Superfund.

The North Station MGP Site was placed on the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) in 1988. In February of 1989, Illinois EPA conducted a Preliminary Assessment of the site. The Site Reassessment Report will describe current site conditions and illustrate how the site has changed since the initial CERCLA Preliminary Assessment. This report will contain a review of existing information to determine site history, current site conditions, and evaluate analytical data that may exist on the site. The Site Reassessment will also support emergency response or time-critical removal activities if it is determined that they are warranted.

Section 2.0 Site Background

Section 2.1 Site Description

The site of the former People's Gas North Station Manufacturing Gas Plant (North Station MGP) is approximately eight acres in size. The site is located in the North Township of Chicago, Illinois, in Cook County. The site is located in the SW ¼ of Section 4, Township 39 North, Range 14 East, of the Third Principle Meridian. A central point to the property can be found at 41.901952N latitude and 87.646595W longitude. The site is bounded on the north by Division Street, to the west by the North Branch of the Chicago River, to the south by Hobbie Street, and to the east by Crosby Street. The Kingsbury right-of-way bisects the site.

The former location of the North Station MGP is now comprised of several properties parceled out from the original North Station MGP property. The eastern parcel which, is bounded by Crosby Street and separated from the other parcels by the Kingsbury right-of-way, is owned by Commonwealth Edison, on which Commonwealth Edison (ComEd) currently operates an electrical substation. The ComEd parcel is approximately six acres in size. To the west of the Kingsbury right-of-way the North Station MGP was divided initially into three separate parcels which have subsequently combined into two (See figure 4).

The part of the former North Station MGP that is located west of the Kingsbury right-or-way is currently known as the LaSalle-Chestnut property and what was once know as the Richheimer Coffee Company and is currently owned by Division-Halsted, LLC (hereafter it will be referred to as the Richheimer Coffee parcel). The LaSalle-Chestnut parcel is approximately two and ¼ acres in size. The Richheimer Coffee parcel is approximately ¾ of an acre in size (See figure 4). Both the LaSalle-Chestnut parcel and the Richheimer Coffee parcel are surrounded by chain link fences and are bounded to the west by the Chicago River North Branch Canal (North Branch Canal). Currently, the LaSalle-Chestnut parcel is a fenced in gravel lot used to store automobiles for a local car dealer and the Richheimer Coffee parcel is fenced and currently used to store freight equipment.

The site is located in a densely populated urban area surrounded by a mixture of residential and commercial properties. The site is immediately surrounded by row houses to the east along Crosby Street and to the south along Hobbie Street. North of the site at the corner of Halsted and Division Street is the Cabrini-Green Public housing high rise complex.

Section 2.2 Site History

According to the *Preliminary Site Investigation* report prepared by Hanson Engineers Incorporated in 1992; in the late 1800s and early 1900s, coal gasification plants were operated in Illinois to supply low BTU gas to residential, commercial, and industrial customers. The Chicago Gas, Light, and Coke Company built and began producing gas at the North Station facility in 1868. In 1885, new condensing, purifying, and metering additions were built and in 1886, a 1,500,000 cubic ft. gas holder was constructed at the facility. In addition to the 1,500,000 cubic ft. gas holder, a 500,000 cubic ft. and a 600,000 cubic ft. holder were used at the facility. Originally, the facility produced coal gas, but it was converted to a water gas plant sometime prior to 1887. The gas manufacturing process used at this site resulted in the production of by-products, predominantly coal tars. These by-products were often sold to other companies for direct use or conversion into other products. People's Gas produced gas at the former North Station MGP site until its retirement in 1960.

Following, the suspension of gas production at the North Station MGP in the 1960s, the site was parceled out into four separate properties (see figure 5). The eastern parcel is owned by Commonwealth Edison on which they operate and electrical substation. To the west of the Kingsbury right-of-way the North Station MGP was divided initially into three separate parcels which have subsequently combined into two.

The northern parcel to the west of the Kingsbury right-of-way was at one point in time owned by the Richheimer Coffee Co. Following the suspension of gas production in the 1960s the Richheimer Coffee Co. property was occupied by a large building that is believed to have likely performed some sort of operation in the processing or packaging of coffee beans. The Richheimer Coffee Co. parcel is currently used to store freight

equipment. The middle parcel was formerly owned by the Wechsler Coffee Corp., following the suspension of gas production in the 1960s, the Wechsler Coffee Corp. property was occupied by a building believed to have likely performed some sort of operation in the processing or packaging of coffee beans. At some point in time after suspension of gas production in the 1960s and prior to its current use, the building located on the Wechsler Coffee Corp. property was dismantled and the property was combined with the property to the south. The southern parcel of the North Station MGP located to the west of the Kingsbury right-of-way is known as the LaSalle-Chestnut property. Following the parceling out of the Peoples' Gas MGP the LaSalle-Chestnut parcel has remained vacant until recently it underwent remedial activities and is now used to store automobiles for a local car dealership.

Historical Sanborn maps compiled for People's Gas by Hanson Engineers (figure 6) reveal that the ComEd parcel was the location of the actual manufactured gas production while the LaSalle-Chestnut parcel, Wechsler Coffee Corp. (now combined with the LaSalle-Chestnut parcel) and the Richheimer Coffee Company parcel were utilized for general storage and the storage of coal and coke.

The *Preliminary Site Investigation* performed by Hanson Engineers Incorporated in 1992, indicates that the aboveground gas plant structures have been removed from the property. These structures were removed in the 1960s. However, below ground portions of gas plant related structures may still be present and could contain manufacturing gas contaminants. Specifically, it has been indicated that the below ground portion of the No. 3 Commercial Gas Holder Tank was abandoned in place and may contain up to 888,000 gallons of coal tar. Furthermore, in interviews with representatives of People's Gas, it was confirmed that underground structures related to the North Station MGP are still present under the ComEd electrical substation.

Section 2.3 Regulatory Status

A review of existing records suggests that the property in question is not subject to the Resource Conservation and Recovery Act (RCRA) corrective action authority. Information currently available does indicate that the site is under the authority of the Atomic Energy Act (AEA), Uranium Mine Tailings Action (UMTRCA), or the Federal

Insecticide Fungicide or Rodenticide Act (FIFRA). The North Station MGP is enrolled in the Illinois EPA Site Remediation Program.

Section 3.0 Field Inspection Activities

Section 3.1 Past Environmental Investigations

A CERCLA Preliminary Assessment for the North Station MGP was conducted in 1989 by Illinois EPA staff. The site was given medium priority status with a recommendation for a site inspection.

A Preliminary Site Investigation of the North Station MGP was prepared by Hanson Engineers in 1992. The Preliminary Site Investigation concluded that the potential for exposure to off-site receptors is minimal. Following the 1992 Preliminary Site Investigation, in January of 1993 the Peoples Gas North Station site entered into what is now the Illinois State Environmental Protection Agency Site Remediation Program.

ComEd Parcel

According to Integrys, representatives of Peoples Gas, from December 6th to 18th, 1999, the Barr Engineering Company conducted remedial actions on a portion of the ComEd parcel. The *Draft Site Investigation and Interim Remedial Action Plan Summary* (The Barr Report) authored by Barr Engineering indicates remedial activities at an area of the parcel that was to be excavated for the future installation of a capacitor bank. (Figure 10) The Barr Report also states that the former capacitor bank foundations were removed and an area of approximately 36 feet by 67 feet was excavated to a depth of approximately 4.5 feet below ground surface. Approximately 420 cubic yards of soil, wood, and galvanized piping materials were removed. A crushed, buried galvanized steel tank approximately 20 feet long by 8 feet in diameter was uncovered and removed. The excavation was backfilled to 3 feet below original site grade with a base of CA-6 crushed rock and then CA-1 gravel. A total of 308 tons of backfill was placed and compacted.

According to the Barr Report, ComEd was reported to have conducted remediation excavations in two additional areas. (Figure 10) During these excavations approximately 1,100 cubic yards of additional soil material was reportedly removed. No mention is made in the report of removal of any below-ground structures during the ComEd remediation activities. Excavated materials from both locations where remedial activities occurred were placed in roll-off boxes and stored onsite prior to characterization and offsite disposal at a Clean Harbors, Inc. facility. Subsequent characterization of these materials showed that they were not considered a hazardous waste.

LaSalle-Chestnut Parcel

The Barr Engineering Company (Barr) conducted a preliminary site investigation on the LaSalle-Chestnut parcel of the former North Station MGP in December, 1999. The Barr investigation indicated that trace odor and sheen could be observed in some soil borings. The Barr investigation primarily concentrated on just the area of the former coal pile and generally excluded the remaining portion of the LaSalle-Chestnut parcel .In July 2001, a Supplemental Site Investigation was conducted to fully define the LaSalle-Chestnut parcel. People's Gas subsequently retained Burns and McDonnell engineering to conduct a SSI on the LaSalle-Chestnut Parcel of the North Station MGP.

The Site Investigation and Supplemental Site Investigation were followed by the completion of a Remedial Objectives Report and Remedial Action Plan (ROP/RAP) which was performed by Burns and McDonnell. The ROR/RAP identified recognized environmental conditions and related impacts at the LaSalle-Chestnut parcel and developed applicable remediation objectives in accordance with Tiered Approach to Corrective Action Objectives (TACO). Based on residential property use scenario, and the results of the SI and SSI, the following remediation objectives were established and met:

- Eliminate the residential soil ingestion exposure route by removing all surface soil (0 to 3 feet below ground soil (bgs)).
- Eliminate the residential soil ingestion exposure route by removing subsurface soil (from 3 to 10 feet bgs) that exceeds Tier 1 RO for indeno(1,2,3-cd)pyrene; and Tier ROs for benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene and dibenzo(a,h)anthracene.

- Eliminate the construction worker soil inhalation exposure route by removing subsurface soil (from 3 to 10 feet bgs) that exceeds the Tier 1 RO for naphthalene.
- Eliminate the groundwater ingestion exposure route by implementing groundwater use restrictions through use of the City of Chicago groundwater ordinance.

According to the ROP/RAP, all excavated soil was disposed of in an Illinois-approved landfill. The excavation was back filled to grade with imported, non-impacted sand and/or stone aggregate, coarse aggregate or a combination thereof. Discussion with representatives of Peoples Gas indicates that they expect to receive a No Further Remediation letter for the LaSalle-Chestnut Parcel from the Illinois EPA SRP, following completion of the remedial activities.

Burns and McDonnell Sediment Study

Burns and McDonnell Engineering were tasked by People's Gas to conduct a sediment study for the North Branch Canal directly adjacent to the Peoples Gas North Station MGP site. The River Sediment Investigation of the Chicago River North Branch Canal for People's Gas North Station MGP was conducted in October of 2006 and April of 2007. The sediment study documented the existence of polycyclic aromatic hydrocarbons (PAHs) related to coal tars in sediments samples collected near a sewer outfall in the Chicago River North branch canal.

U.S. EPA and U.S. Army Corp of Engineers Sediment Study

In October 2000, the U.S. Environmental Protection Agency's Great Lakes National Program Office (GLNPO) and the U.S. Army Corps of Engineers (USACE) coordinated a baseline screening study to provide a broad view of sediment conditions throughout the Chicago River system, specifically the North and South Branch. The sediment study conducted by the GLNPO and the USACE provides information for establishing background conditions in the North Branch of the Chicago River upgradient from the North Station MGP Site.

Section 3.2 Field Inspections

In response to the written request to conduct a CERCLA Site Reassessment of the North Station MGP in April of 2007, staff of the Illinois EPA conducted a site reconnaissance of the property on July 2, 2007. Illinois EPA staff was met by staff of Integrys representing Peoples Gas. The reconnaissance team did not have access to the site (LaSalle-Chestnut parcel) and the project manager for Peoples Gas was unable to get in contact with the current owner of the site.

Reconnaissance of the site revealed that to the south of the site there are residential row houses/town homes. There are also row houses/town homes to the east of the property. Across Division Street to the north of the ComEd parcel there is the Cabrini-Green high rises complex, which still contains inhabitants. Visual reconnaissance revealed that the LaSalle-Chestnut parcel is surrounded by a locked chain link fence restricting access to the site (see appendix A).

Remediation performed under the Illinois EPA Site Remediation Program (SRP) oversight has been completed at the LaSalle-Chestnut parcel. People's Gas is currently waiting for a No further Remediation letter from the Illinois EPA SRP. Interviews with People's Gas representatives and a general visual reconnaissance revealed that the LaSalle-Chestnut parcel is currently being used to store cars for a local Lexus dealer. The Richheimer Coffee parcel to the North of the LaSalle-Chestnut parcel appears to be currently used for the storage of freight equipment (See Appendix A).

To the East of the LaSalle Chestnut parcel across location of the Kingsbury right-of-way is the ComEd parcel on which Commonwealth Edison operates an electrical substation. The ComEd parcel is surrounded by a chain link fence which restricts access to the site. Representatives of People's Gas confirmed that beneath the ComEd parcel most of the underground structures related to gas production are believed to remain. Furthermore, representatives of Peoples Gas indicated that there was an underground sewer, or something similar, that originated on the ComEd parcel of the site and travels under the LaSalle-Chestnut parcel to an outfall point just beneath the water level of the adjacent North Branch Canal. It was further discussed that sediment studies conducted on behalf of Peoples Gas indicated that coal tar product that most likely came from the MGP was found around the outfall of the said sewer.

Section 3.3 Analytical Data

There was no analytical data generated over the course of this investigation. While there was no analytical data generated there is pertinent analytic data that exists. Burns and McDonnell Engineering conducted a sediment study adjacent to the site in the North Branch Canal. The sediment study documented the existence of coal tars associated with coal gasification and elevated PAH levels in samples collected near a sewer outfall in the North Branch Canal.

Section 4.0 Potential Sources

Sources include a number of underground structures related to the gas production that are believed to remain beneath the ComEd electrical substation. These structures include a number of underground gas, oil and tar tanks. According to historical Sanborn maps compiled together by Hanson Engineers (figure 4), a total of 14 structures that may be present under the ComEd parcel have been identified as possible sources of manufactured gas contaminants. The 14 structures that may be present as potential sources under the ComEd parcel are listed as follows:

- Number 3 commercial Gas holder (1.5 million cu. ft. capacity) (Known to be abandoned in place with up to 888,000 gallons of coal tar)
- Buried oil tank (approx. 9400 gal.)
- Buried oil tank (approx. 9400 gal.)
- Buried oil tank (approx. 294,520 gal.)
- Tar tank (approx. 158,630 gal)
- Oil tank (size unknown)
- Oil tank (size unknown)
- Oil tank (size unknown)
- Underground tar settling well (size unknown)
- Underground tar settling well (size unknown)
- Underground tar settling well (size unknown)
- Buried oil tank (former Naphtha tank) (approx. 9,400 gal.),
- Oil tank (approx 600,000 cu. ft.)
- Relief holder (approx. 500,000 cu. ft.)

Section 5.0 Pathway Discussions

Section 5.1 Groundwater

The groundwater pathway is primarily concerned with the potential of contaminates to migrate into the local groundwater, which is reflected in the characterization of the geological conditions underlying the property in question. Second, the groundwater pathway is concerned with the existence and impact on drinking water wells and resources within the area where a contaminant had migrated into the groundwater.

Groundwater resources in the Chicago region are developed from four aquifer systems: 1) sand and gravel deposits of glacial drift; 2) shallow dolomite formations, mainly of Silurian age; 3) Cambrian – Ordovician Aquifer, of which the Ironton – Galesville and Glenwood – St. Peter Sandstones are the most productive formations; and 4) the Mt. Simon Aquifer, consisting of sandstone of the Mt. Simon and lower Eau Claire Formations of Cambrian age.

Water-yielding localized sand and/or silt lenses, and to a greater extent, sand and gravel deposits, occur in the drift, particularly in valleys cut into bedrock. Silurian age dolomite, which is widely used as a source of groundwater, is the upper most bedrock formation in the region and considered as the shallow dolomite aquifer. The glacial drift and the shallow dolomite aquifers are hydrologically connected and are recharged directly by seepage from precipitation. They are separated from the Cambrian – Ordovician Aquifer in most of the region by the relatively impervious Maquoketa Group Shale. The Cambrian – Ordovician Aquifer rises westward and is recharged at the surface or through glacial deposits west of the outcrop area of the Maquoketa Shale along the western edge of the Chicago region (beyond the western boundaries of Lake, Du Page, Cook, and Will Counties). The Cambrian – Ordovician Aquifer is separated from the Mt. Simon Aquifer by the shaly and silty beds of the Eau Claire Formation that prevents flow between the aquifers. The Mt. Simon Aquifer has a higher artesian pressure than the other aquifers, but the water quality in the eastern part of the Chicago region is not acceptable for many uses. This aquifer is recharged largely from the

outcrop region of Cambrian rocks in central southern Wisconsin. The Cambrian – Ordovician Aquifer has been the most highly developed bedrock aquifer; however, approximately 60 percent of the total pumpage in the Chicago region is from the glacial drift and shallow dolomite aquifer with no widespread decline in water level.

As indicated earlier there can be adequate groundwater reserves within the various aquifers in the Chicago region. However, the City of Chicago draws water from Lake Michigan and distributes it throughout the metropolitan and suburban transmission system for drinking water purposes. The City of Chicago also has a groundwater ordinance that prohibits the installation of new potable water supply wells within the city limits (Appendix B). The Illinois State Geological Survey (ISGS) and the Illinois State Water Survey (ISWS) indicate that there are no private drinking water wells within a four mile radius of the site (figure 6). A review of the 26 ISGS water wells reveals that within a 4 mile radius of the site are used for commercial and/or industrial processing purposes.

The ComEd parcel of the site is mostly covered by buildings or pavement, which would inhibit the infiltration of rainwater through the contaminated zone. Because of the fact that there are several MGP related structures under the ComEd parcel and it is known that one of the structures was abandoned in place containing up to 888,000 gallons of coal tar, there is a potential for contamination to migrate into the groundwater. The LaSalle-Chestnut parcel has undergone extensive remedial activities that removed contaminated soil which would reduce the possibility of contaminants entering the groundwater. The Richheimer Coffee Co. parcel north of the LaSalle-Chestnut parcel has not undergone remedial activities and is currently a gravel lot that stores freight equipment. There is a potential for contaminants on the Richheimer Coffee parcel to impact the area groundwater. It should be noted however, that historically the Richheimer Coffee parcel was utilized for general storage making the presence of contaminants related to the MGP unlikely. Due to the City of Chicago drinking water ordinance and the geological conditions of the area, the People's Gas North Station site poses a potential risk to the area groundwater and specifically its impact on human populations.

Section 5.2 Surface Water

The surface water pathway consists of two parts. The first part is the overland flow and its path to the probable point of entry (PPE) into a perennial surface water river, lake, or stream. From there, the surface water pathway extends for 15 miles from the PPE.

Surface water runoff from the site and the potential for infiltration of surface water exists at the site. Surface water runoff is controlled primarily by storm water sewer drains which enter the city's combined sewer system. The sewer water is sent through a sewage treatment plant before being discharged to a surface water body. The ComEd parcel is paved but the LaSalle-Chestnut parcel has undergone remediation and is now currently covered with gravel.

Based on United States Geological Survey (USGS) topographic mapping and site observations, the natural surface water runoff is to the west toward the North Branch Canal. Surface water runoff from the ComEd parcel is controlled primarily by storm water sewers which enter the city's combined sewer system, but with the LaSalle-Chestnut and Richheimer Coffee parcel a potential exists for storm water runoff to reach the North Branch. Due to the remedial activities that have taken place at the LaSalle-Chestnut parcel and the historic use of the Richheimer Coffee parcel for simply general storage there is a very small potential for contaminants to migrate off site from either the LaSalle-Chestnut or Richheimer Coffee parcel.

A likely migration pathway from the North Station MGP facilities west of Crosby Street to the river is from a 16 inch diameter plant water line leading from the middle of the ComEd parcel under the Kingsbury right-of-way, under the LaSalle-Chestnut parcel to the river. A smaller plant water line (12-inch diameter) is found just south of the 16 inch water line and follows along the same path as the 16 inch plant water line. Approximately 40 feet north of the two plant water lines (12 inch and 16 inch) there is a 36 inch diameter former sewer line that ran from the middle portion of the ComEd parcel under the Kingsbury right-of-way, under the LaSalle-Chestnut parcel to the river. These plant water lines and sewer may have provided a conduit for MGP wastes to enter the river. For the purpose of this report, the probable point of entry (PPE) will be considered the intersection of the 16 inch water line and the North Branch of the Chicago River. The PPE is the point where the overland segment reaches an eligible surface water body.

The Target Distance Limit (TDL) extends 15 miles downstream from the PPE in the direction of flow or to the most distant sample point establishing an observed release, whichever is greater. The 15 Mile TDL Map is depicted in Figure 7. The 15 mile TDL begins at the PPE just west of the site, then follows the North Branch Canal south east for ¼ of a mile, then it intersects with the North Branch of the Chicago River and follows the North Branch south east for about one mile and then flows into the South Branch of the Chicago River. The surface water pathway then follows the South Branch of the Chicago River in a southern direction for four miles. The surface water pathway then enters the Chicago Ship and Sanitary Canal where it follows the canal in a south western direction for 10 miles. The 15 mile TDL terminates within the Chicago Sanitary and Ship Canal near Summit and Bedford Park, Illinois.

There are no surface water intakes along the North Branch of the Chicago River nor the Chicago Sanitary and Ship Canal. The North Branch of the Chicago River is classified as a fishery and is composed of bullhead, carp, and sunfish with smaller species of sport fish. While, there is no information regarding whether or not the Chicago River North Branch Canal is a fishery, because of its proximity and connection to the Chicago River North Branch it is most likely that the fishery extends to the canal. The Chicago Ship and Sanitary Canal is classified as a fishery and supports mainly carp and other less desirable species. Neither of the fisheries supports state or federally listed threatened or endangered species.

According to the Federal Emergency Management Agency (FEMA), the site is not within the limits of the 100 year floodplain for the North Branch of the Chicago River. According to the Illinois Department of Conservation's Natural Heritage Database there are no federal or state threatened or state endangered species or pristine natural areas occurring in the vicinity of the site. No wetland areas are shown within the boundaries of the site on the National Wetland Inventory maps developed by the U.S. Fish and Wildlife Service.

There is evidence of an observed release to the surface water pathway from the North Station MGP site. It is known that there are two underground sewer and/or water lines that originate onsite under the ComEd parcel. There are also underground structures containing large quantities of coal tar that still exist beneath the North Station MGP. The

sewer and water lines terminate at an outfall in the North Branch Canal. Sediment studies conducted by Burns and McDonnell Engineering indicate the presence coal tars and elevated PAHs in samples collected near the sewer and water lines. Levels of Naphthalene found in sediment samples collected by Burns and McDonnell Engineering were found in excess of three times the established background level of Naphthalene in the North Branch of the Chicago River.

Section 5.3 Soil Exposure

The site of the former North Station MGP is approximately eight acres in size. The site is bounded on the north by Division Street, to the west by the North Branch Canal, to the south by Hobbie Street, and to the east by Crosby Street. The Kingsbury right-of-way bisects the site.

Following, the suspension of gas production at the Peoples Gas North Station MGP in 1960, the site was parceled out into four separate properties which later combined into three separate properties. The eastern parcel is owned by Commonwealth Edison on which they operate an electrical substation. East of the Kingsbury right-of-way the former location of the North Station MGP was divided originally into three parcels, but subsequently has combined into two. The northern parcel was at some point in time occupied by the Richheimer Coffee Co. which is currently used to store freight equipment. The central parcel was at one point occupied by the Wechsler Coffee Corp., but has subsequently been combined with the parcel to the south. The southern parcel of the portion of the People's Gas MGP located to the east of the Kingsbury right-of-way is known as the LaSalle-Chestnut property. Following the parceling out of the North Station MGP, the LaSalle-Chestnut parcel has remained vacant, until recently it underwent remedial activities and is now used to store automobiles for a local car dealership.

The LaSalle-Chestnut, Richheimer Coffee, and ComEd Parcels are surrounded by chain link fences preventing public access to the site. The ComEd parcel also contained multiple structures and is for the most part entirely covered with pavement or structures acting as an engineered barrier preventing contact and exposure to soil contamination. Since, the Richheimer Coffee parcel was historically used for general storage there is little concern regarding the presence of contaminants.

The site is located in a densely populated urban area surrounded by a mixture of residential and commercial land use. The site is immediately surrounded by row houses to the east along Crosby Street and to the south along Hobbie Street. North of the site at the corner of Halsted and Division Street is the Cabrini-Green Public housing high rise complex. There are no schools within 200 feet of the site but there are several schools within a one mile radius of the site.

Nearby population within one-mile of the site

Distance (mi)	Population
On-Site	5
0 – ¼ mile	3504
¼ - ½ mile	7313
½ - 1 mile	66601
Total	**77423**

Section 5.4 Air Route

The majority of the People's Gas North Station Site is covered by a buildings, pavement or gravel. In addition, the LaSalle-Chestnut parcel has undergone extensive remedial activities. In regards to the ComEd parcel, the presence of structured barriers would inhibit gas or particulate material from being incorporated in the air. In regards to the LaSalle-Chestnut parcel the removal of contaminants inhibits gas or particulate matter from being suspended in the air. The historical use of the Richheimer Coffee parcel for general storage reduces the potential for contaminants to become suspended in the air. Due to these conditions, the air route was not evaluated.

Population within four miles of the site

Distance (mi)	Population
On-Site	10
0 – ¼ mile	3504
¼ - ½ mile	7313
½ - 1 mile	66601
1 – 2 miles	137658
2 – 3 miles	180611
3 – 4 miles	239823
Total	**635520**

Section 6.0 Summary

The Illinois EPA's Office of Site Evaluation was tasked to evaluate the People's Gas North Station Site to determine its current and potential impact on the surrounding human populations, nearby surface waters, and area groundwater. The evaluation utilized existing data and research on the North Station MGP Site and general historical information about MGPs.

The site of the former North Station MGP is approximately eight acres in size. Following the retirement of the MGP in the 1960s, the aboveground gas plant structures were removed from the site. However, below ground portions of gas plant related structures may still be present and could contain manufacturing gas contaminants. Specifically, it has been indicated that the below ground portion of the No. 3 Commercial Gas Holder Tank was abandoned in place and may contain up to 888,000 gallons of coal tar.

The former location of the Peoples Gas North Station MGP was parceled out into four separate properties, which were later combined into three. The largest of the parcels, is located east of the Kingsbury right-of-way, on which Commonwealth Edison currently operates an electrical substation. The southern parcel to the west of the Kingsbury right-of-way is known as the LaSalle Chestnut parcel. This parcel has recently undergone extensive remedial activities and is currently a fenced gravel lot used to store cars for a local car dealership. The northern parcel to the west of the Kingsbury right-of-way formerly was the Richheimer Coffee Co. Currently this parcel is a fenced in gravel lot used to store freight equipment.

There is a potential that groundwater beneath the site may be impacted by contaminant sources located under the ComEd parcel. However, the only groundwater wells that have been identified in the vicinity are used for industrial/commercial processing purposes. The City of Chicago also has a groundwater ordinance that prohibits the installation of new potable water supply wells within the city limits. There is a minimal risk posed to area groundwater from this site.

The North Station MGP site is located adjacent to the North Branch Canal. Sewer and water lines extend under the ComEd and LaSalle-Chestnut parcel to an outfall in the North Branch Canal and provide a conduit for MGP wastes to enter in the North branch Canal. The North Branch Canal is a fishery. The North Station MGP poses a substantial risk to the nearby surface water pathway for the following reasons: potential source material exists beneath the ComEd parcel, a preferential pathway for contaminant migration has been identified, and an observed release has been documented.

The ComEd parcel is covered in pavement and structures which limits worker exposure. The ComEd parcel is also surrounded by a large chain-link fence which prevents outside access. The ComEd parcel is where structures related to the MGP plant production process were located. The Richheimer Coffee and LaSalle-Chestnut were respectively used utilized for general storage and the storage of coal and coke storage. The presence of structural barriers, previous remedial activities, and historic use, limits the possibility of soil exposure and the suspension of particulate material.

Section 7.0 References

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Larson, et. al. Preliminary Report on Ground-Water Resources of the Chicago Region, Illinois. State of Illinois Cooperative Ground-Water Report I, 1959.

Piskin and Bergstrom, Glacial Drift in Illinois: Thickness and Character. Illinois State Geological Survey, Circular 490, 1975.

Lineback, *Quaternary Deposits of Illinois Map*. Illinois State Geologic Survey, 1979

http://dnr.state.il.us/fish/digest/digest.pdf (Illinois Department of Natural Resources)

o

QUICKSCORE (confidential)

QUICKSCORE **(print all applicable pathway score sheets)**

Site Summary and Recommendation **(permanently attached to the inside of the QUICKSCORE package)**

- **The site summary and recommendation is a 1 – 2 page discussion that summarizes the findings of the Preliminary Assessment Report and provides recommendations of what needs to happen to the site.**

Suggested Information	Potential Resources
Should the Site Continue Along the CERCLA Route (i.e. – what should be done with the site)? One of These Conclusions 1. Should it move along the Superfund Process? 2. Should it move to another state or federal clean-up program? 3. No Further Action?	• QUICKSCORE • All available site information

Upon Completion of the Report – File Under SF/HRS

Figure 1
Site Location Map

Figure 2
Site Area Topographical Map

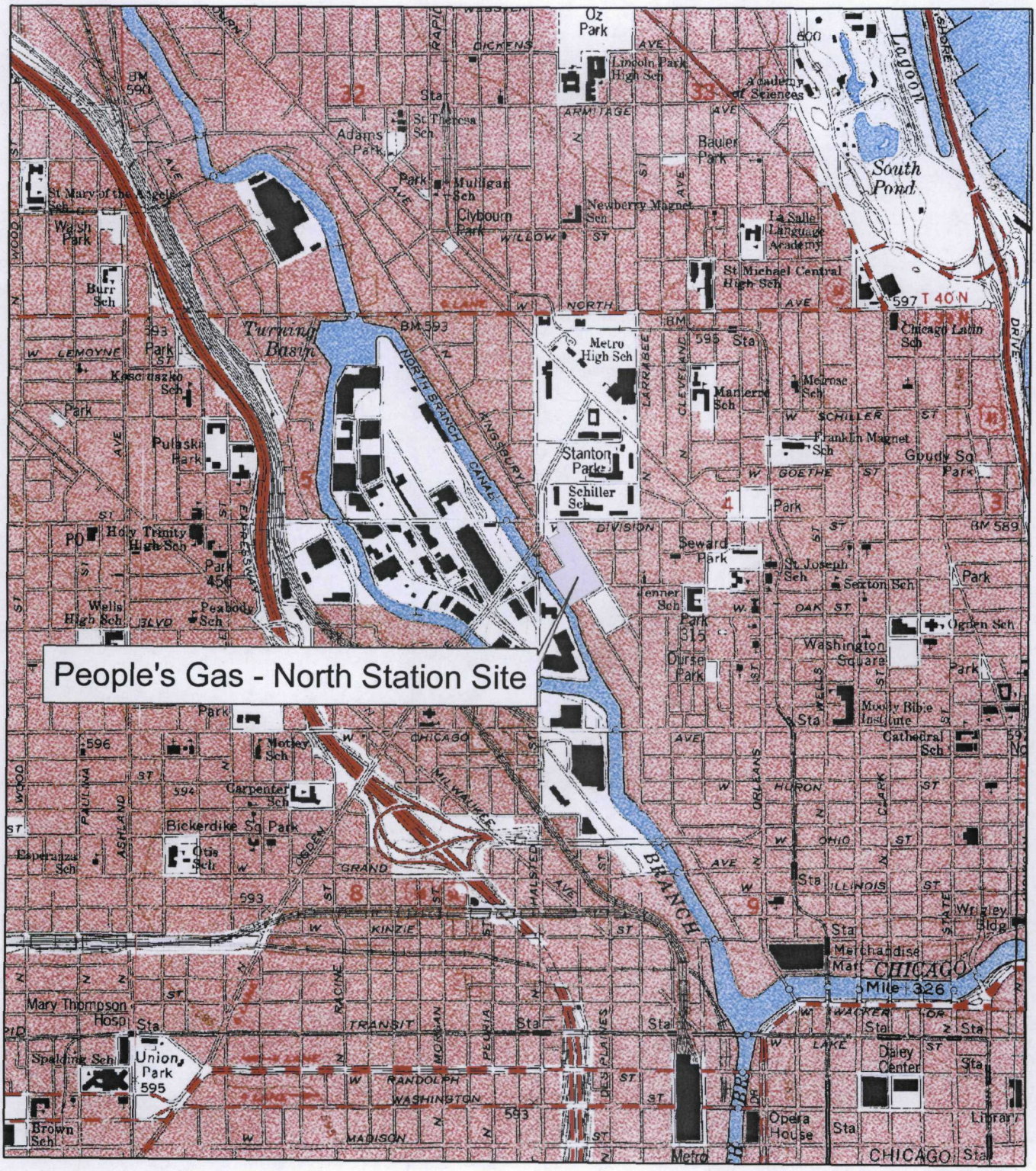
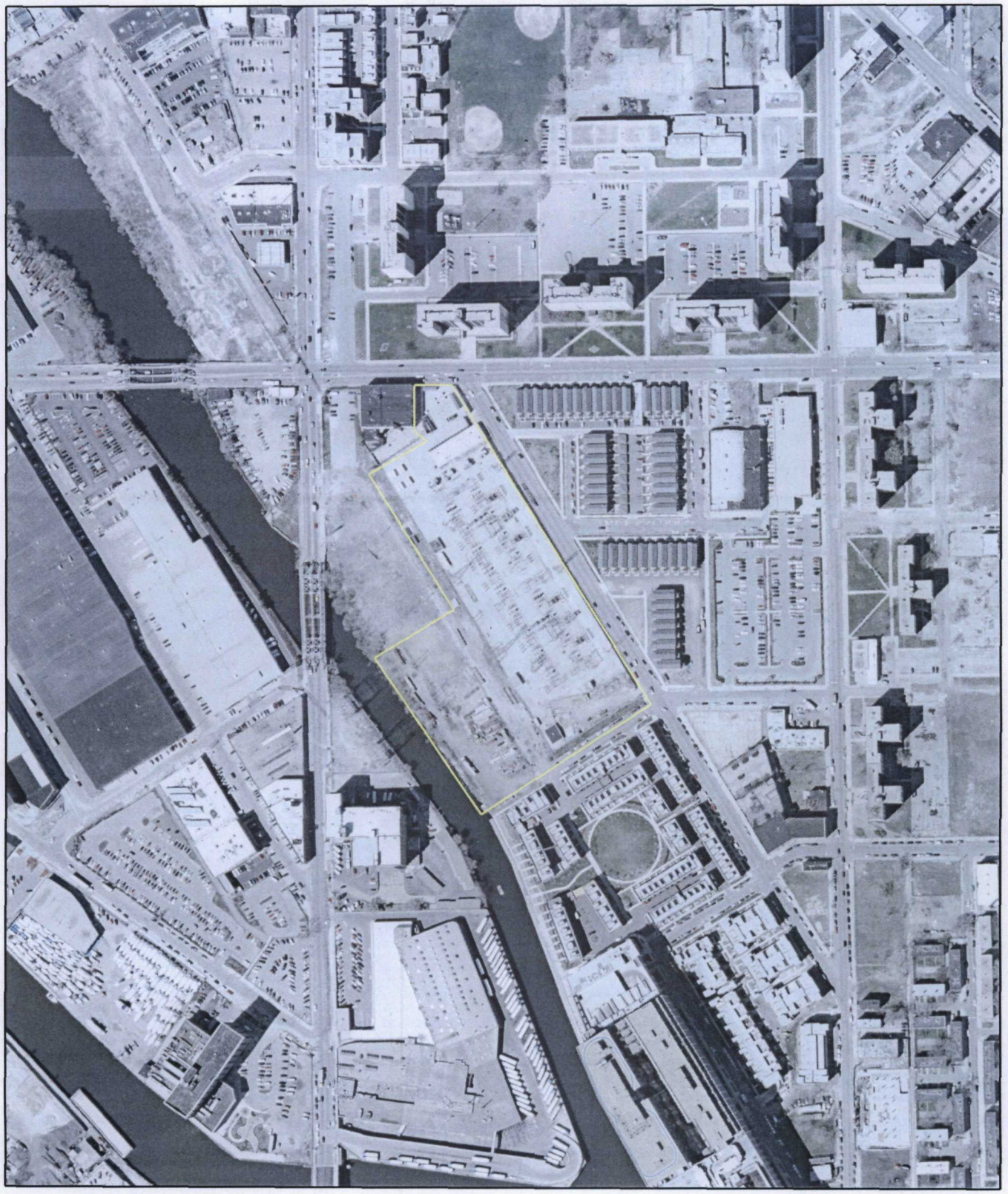


Figure 3
Aerial Photograph of the Site



N

0 0.03 0.06 0.12 0.18 0.24
Miles

Figure 4
Current Parcels of Former MGP

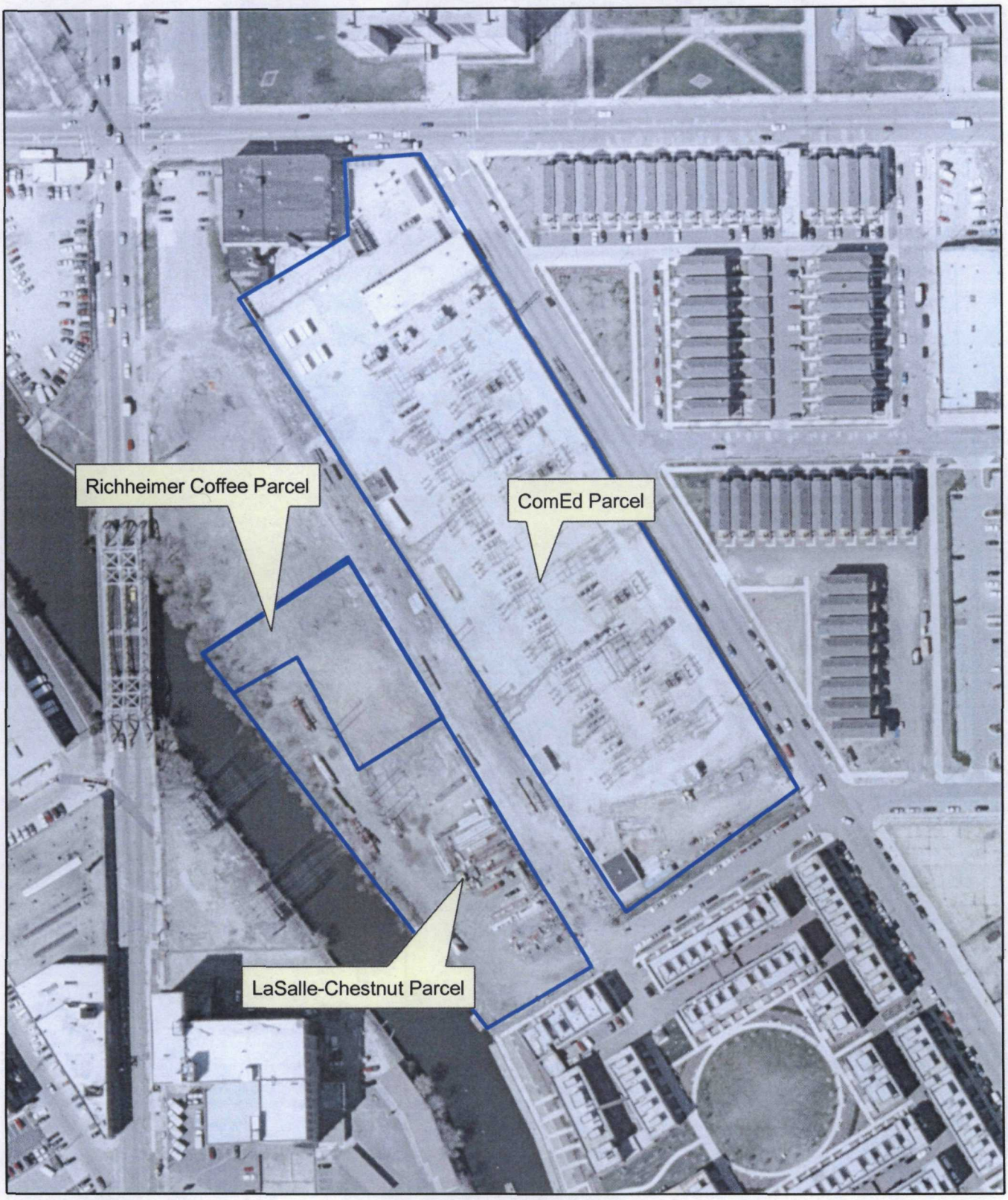
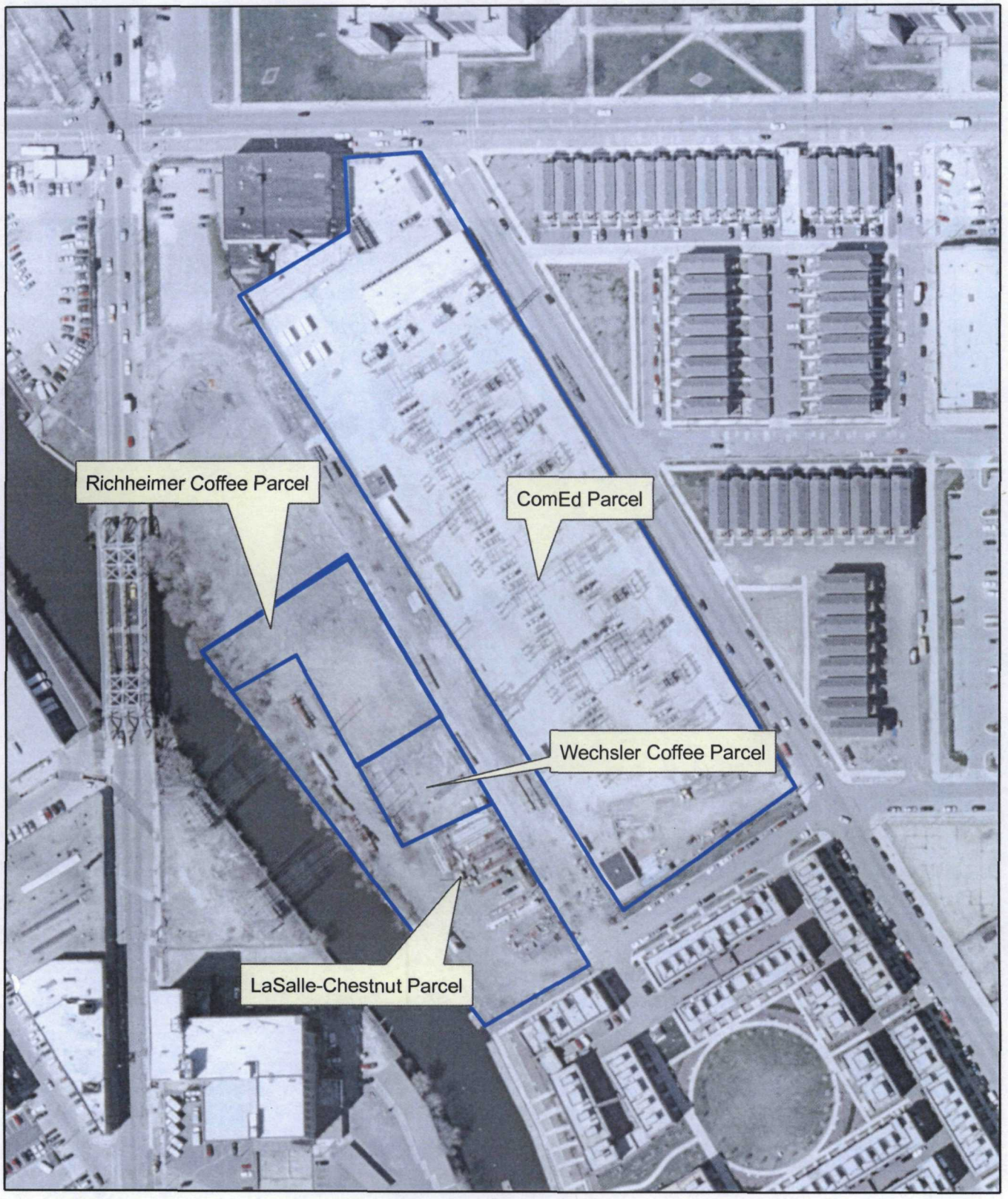


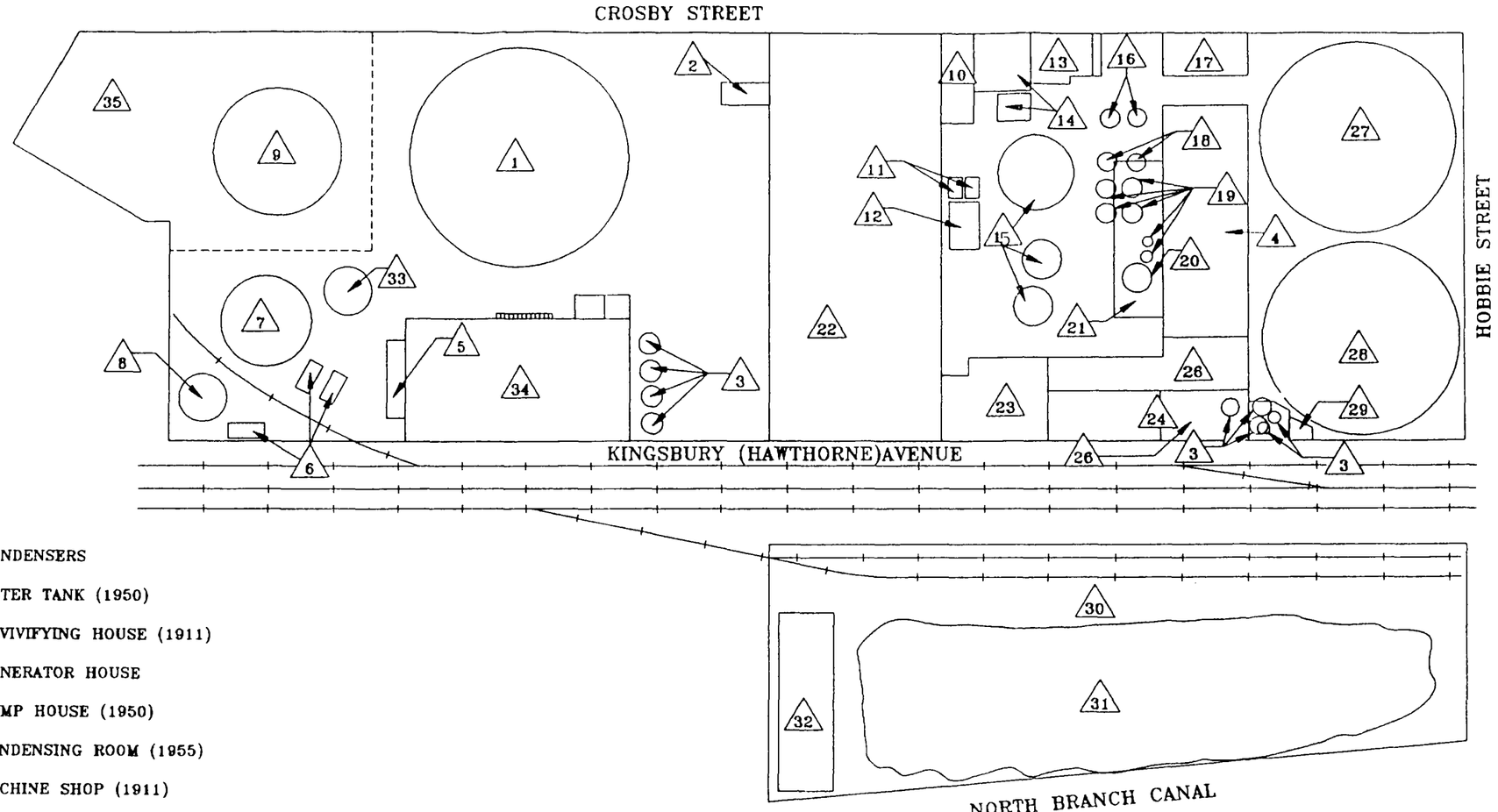
Figure 5
Historic Parcels of Former MGP



N

0 70 140 280 420 560
Feet

Figure 6
1911-1955 Sanborn Map
(Hanson Engineers, 1992)



LEGEND

1. NUMBER 3 COMMERCIAL GAS HOLDER (1.5 MILLION CU. FT. CAPACITY)
2. ASH HOPPER
3. SHAVING SCRUBBERS
4. PURIFYING HOUSE
5. OIL PUMP HOUSE
6. BURIED OIL TANKS
7. BURIED OIL TANK (294,000 GAL.)
8. TAR TANK
9. OIL TANK (1950)
10. CHIMNEY (1911); PUMP ROOM 1955
11. OIL TANKS (1950)
12. OIL CONDENSER (1950)
13. STORE HOUSE
14. LIGHT OIL PLANT (1955)
15. TAR SETTLING WELLS
16. LIGHT OIL SCRUBBERS (1950)
17. METER ROOM
18. TAR EXTRACTORS (1950)
19. CONDENSERS
20. WATER TANK (1950)
21. REVIVIFYING HOUSE (1911)
22. GENERATOR HOUSE
23. PUMP HOUSE (1950)
24. CONDENSING ROOM (1955)
25. MACHINE SHOP (1911)
26. STORE ROOM (1950)
27. 800,000 CU. FT. RELIEF HOLDER (1911); OIL TANK (1950)
28. OIL TANK (1911); 500,000 CU. FT. RELIEF HOLDER (1950)
29. OIL PUMPS (1950)
30. COKE SHED (1911)
31. COAL PILE (1950)
32. STORAGE (1950)
33. NAPTHA TANK (1911); BURIED OIL TANK (1950)
34. REVIVIFYING HOUSE (1911); PURIFYING HOUSE (1950)
35. PARCEL ADDED TO SITE IN 1950

SOURCE: PEOPLES GAS LIGHT AND COKE COMPANY, SITE PLAN, 1912; PEOPLES GAS LIGHT AND COKE COMPANY, DRAWING NOT NUMBERED, LAST REVISION 03/14/52; CITY OF CHICAGO SANBORN MAPPING, VOL. 2, FILE 101, 1911 AND 1950.

Scale In Feet

85 0 85 170

SITE PLAN (1911–1955)

HANSON ENGINEERS INCORPORATED

PEOPLES GAS LIGHT & COKE CO.
NORTH STATION
CHICAGO, ILLINOIS

JOB NO. 88S5062A FIGURE 1.3

88S5062A\001

Figure 5
Peoples Gas North Station
4 Mile Radius Map

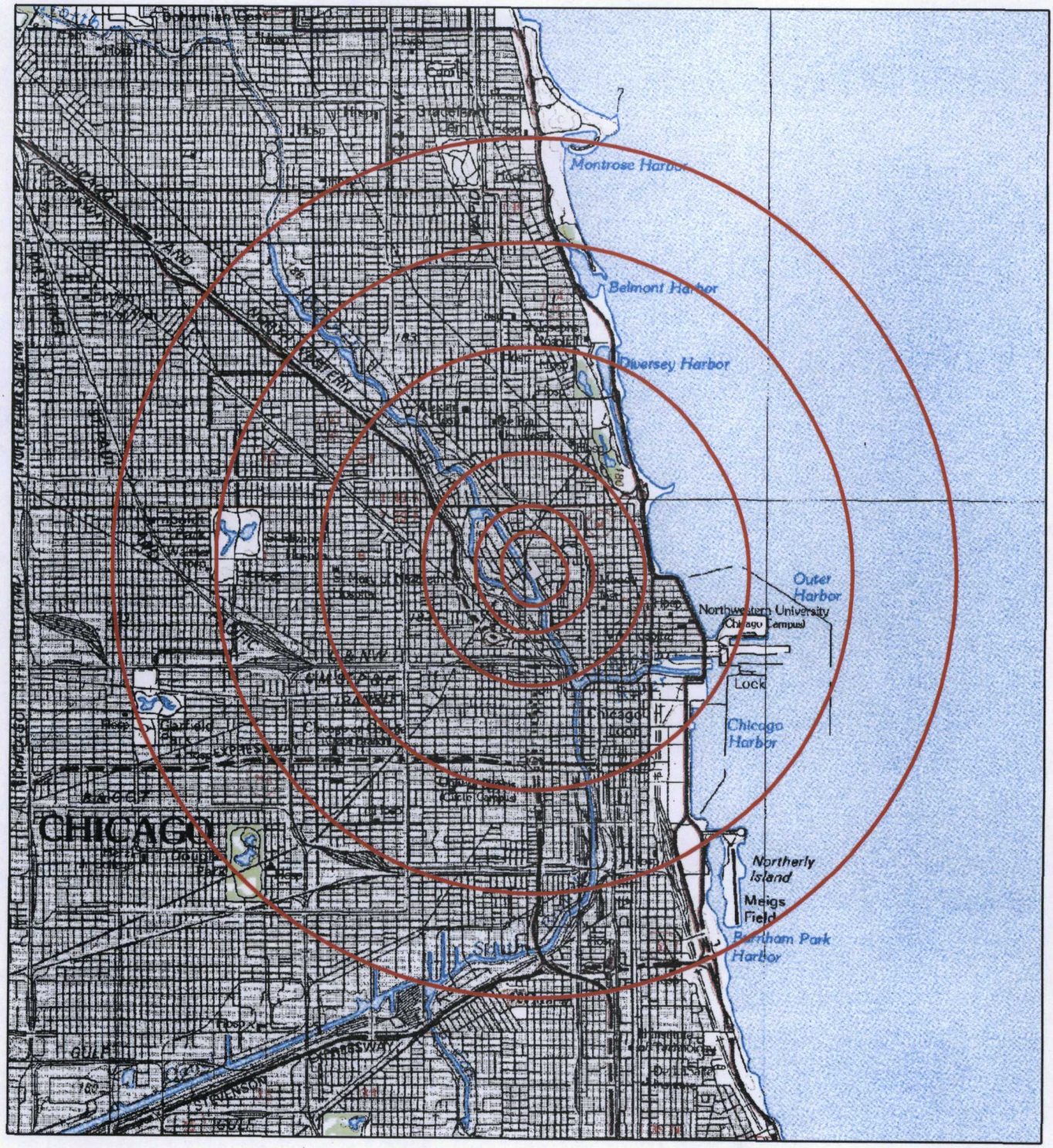


Figure 6
Peoples Gas North Station
Water Wells Map

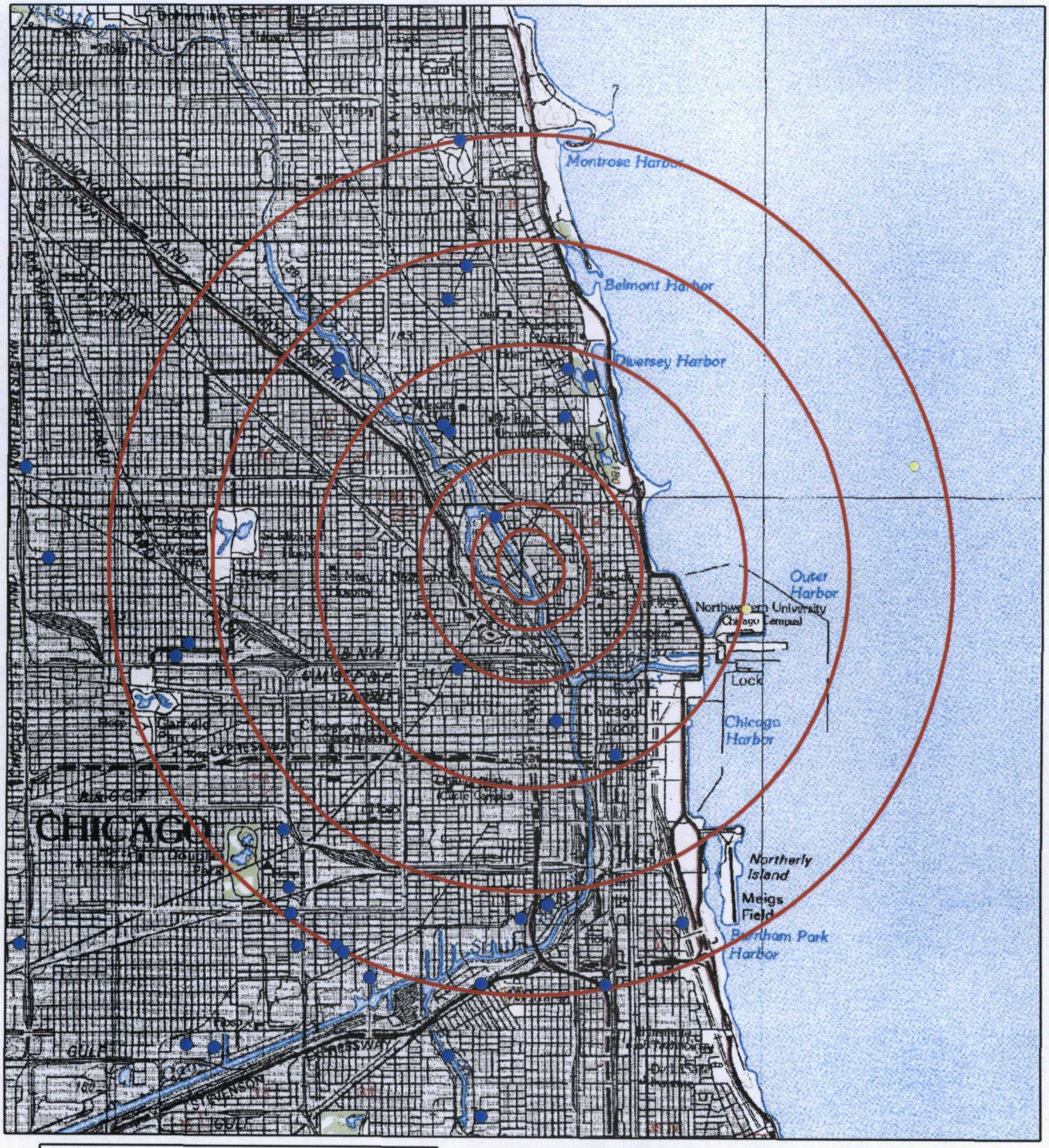


Figure 7
4-mile Radius Map

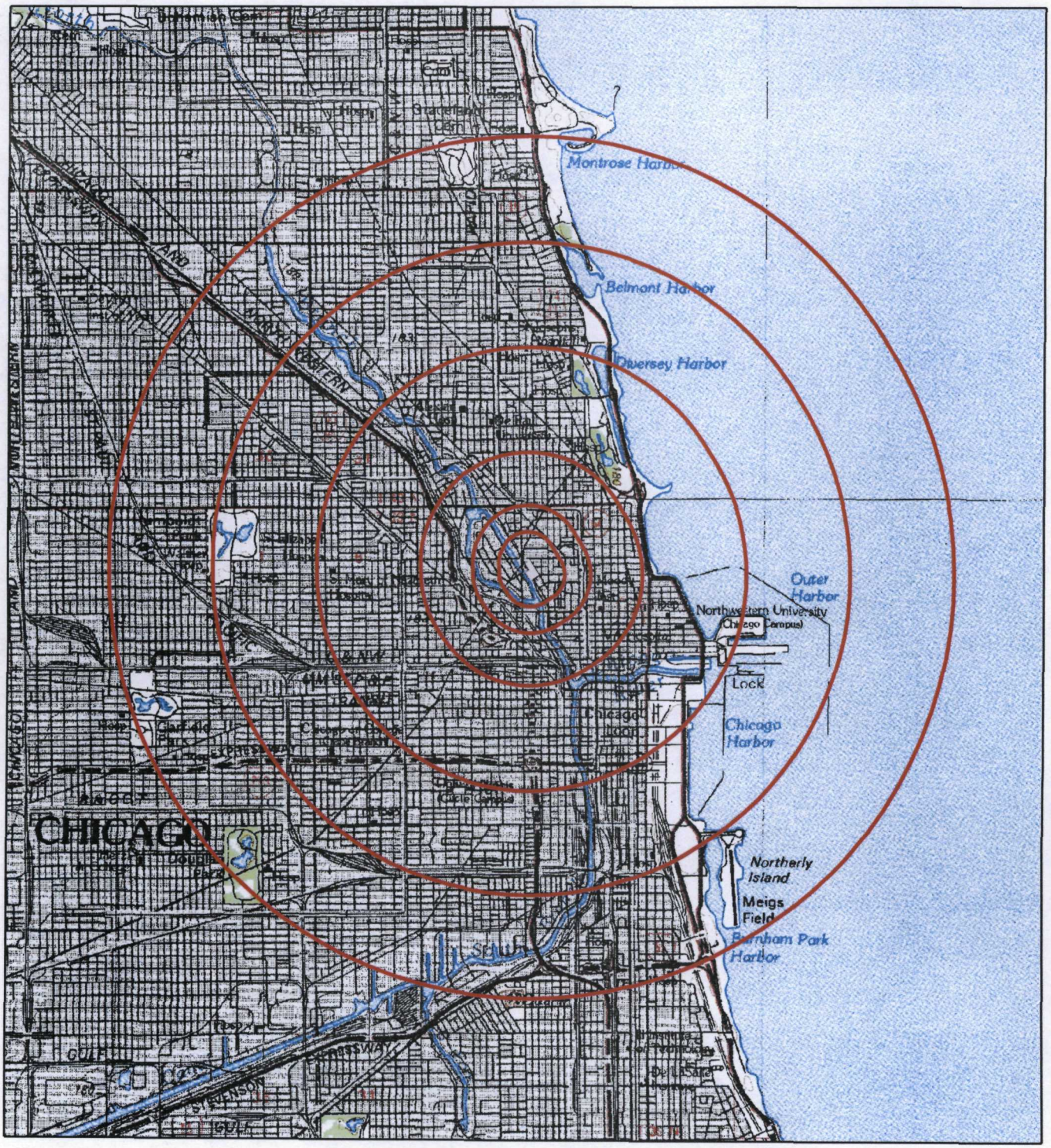
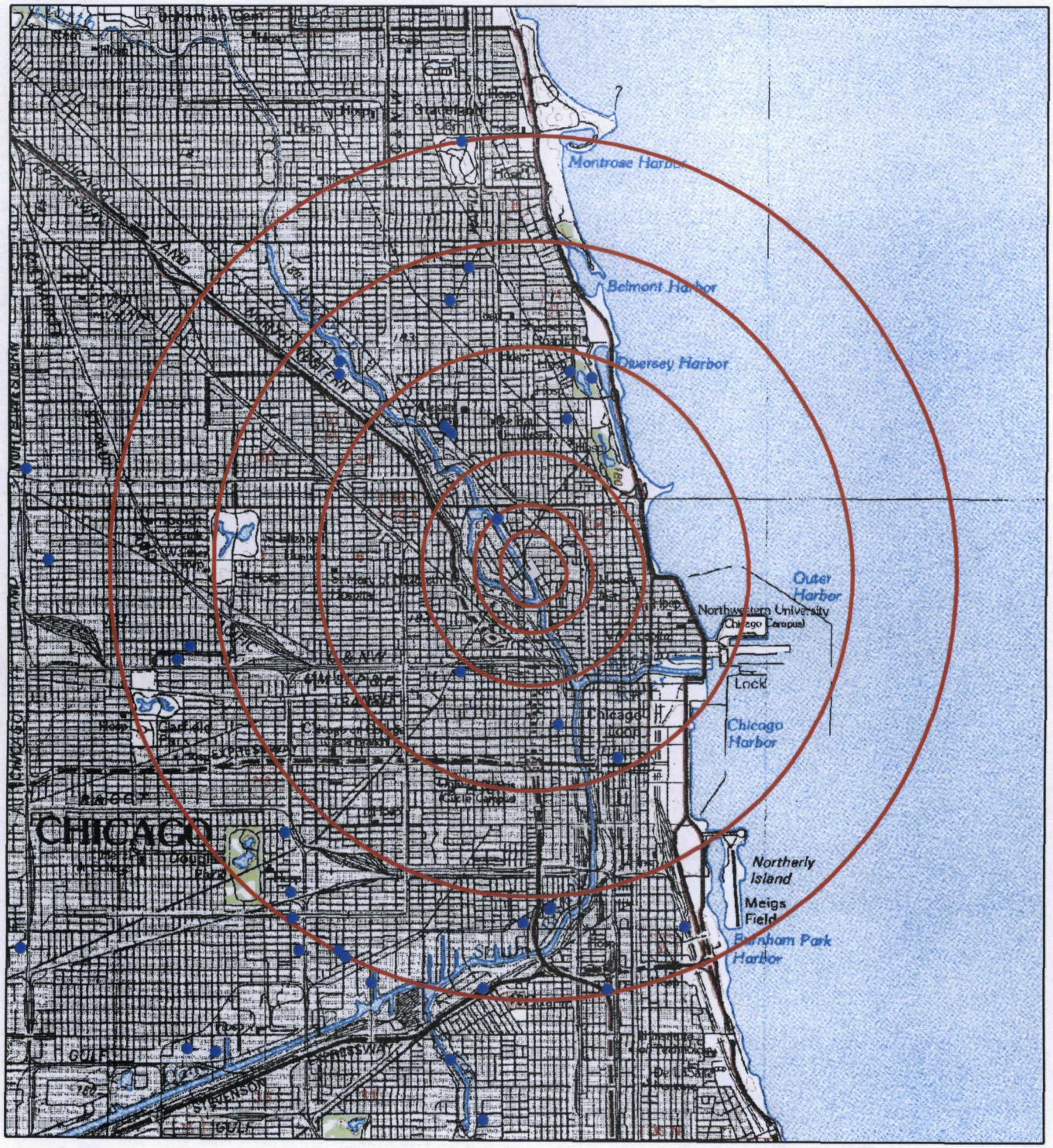


Figure 8
Water Wells Map



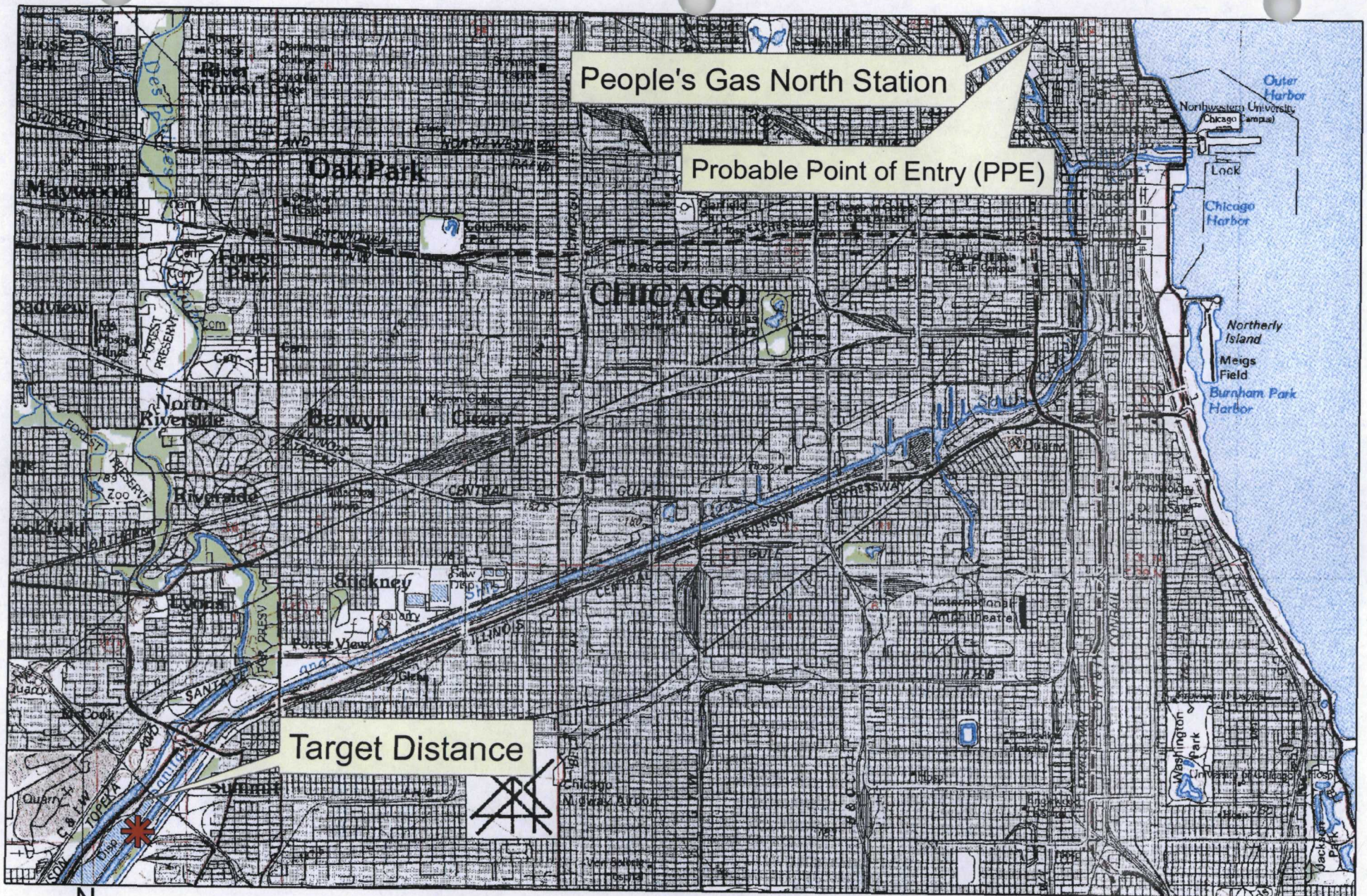


Figure 9
Peoples's Gas North Station
15 Mile Surface Water Pathway Map

Appendix A

Illinois EPA Photo Log

SITE NAME:	**Peoples Gas North Station**
CERCLIS ID: 982074775	**COUNTY: Cook**

DATE: 7-2-07
TIME: 11:30
PHOTO BY: Wesley King
DIRECTION: SE
COMMENTS: Southern end of site. Corner of Hobbie and Kingsbury (former).

DATE: : 7-2-07
TIME: 11:35
PHOTO BY: Wesley King
DIRECTION: West
COMMENTS: LaSalle-Chestnut parcel. Photo taken at the gate to the parcel.

DATE: 7-2-07
TIME: 11:35
PHOTO BY: Wesley King
DIRECTION: SW
COMMENTS: LaSalle-Chestnut parcel. Photo taken at the gate to the parcel. Building in the back ground is on the opposite side of the canal.

DATE: 7-2-07
TIME: 11:40
PHOTO BY: Wesley King
DIRECTION: NW
COMMENTS: Taken from Kingsbury (former) near the NE corner of the LaSalle-Chestnut parcel. Photo of Coffee North.

DATE: 7-2-07

TIME: 11:40

PHOTO BY:
Wesley King

DIRECTION: North

COMMENTS:
Taken from Kingsbury (former) near the NE corner of the LaSalle-Chestnut parcel. ComEd substation is seen in the foreground. Cabrini-Green High-rises can be seen in the back ground.

DATE: 7-2-07

TIME: 11:40

PHOTO BY:
Wesley King

DIRECTION: East

COMMENTS: Taken from Kingsbury (former) near the NE corner of the LaSalle-Chestnut parcel. ComEd substation is seen in the foreground.

Chicago skyline is seen in the background.

DATE: 7-2-07

TIME: 11:45

PHOTO BY:
Wesley King

DIRECTION: NE

COMMENTS: Taken from Kingsbury (former). Seen in the foreground is a section of ComEd parcel that underwent remediation. Cabrini-Green high-rises are seen in the background.

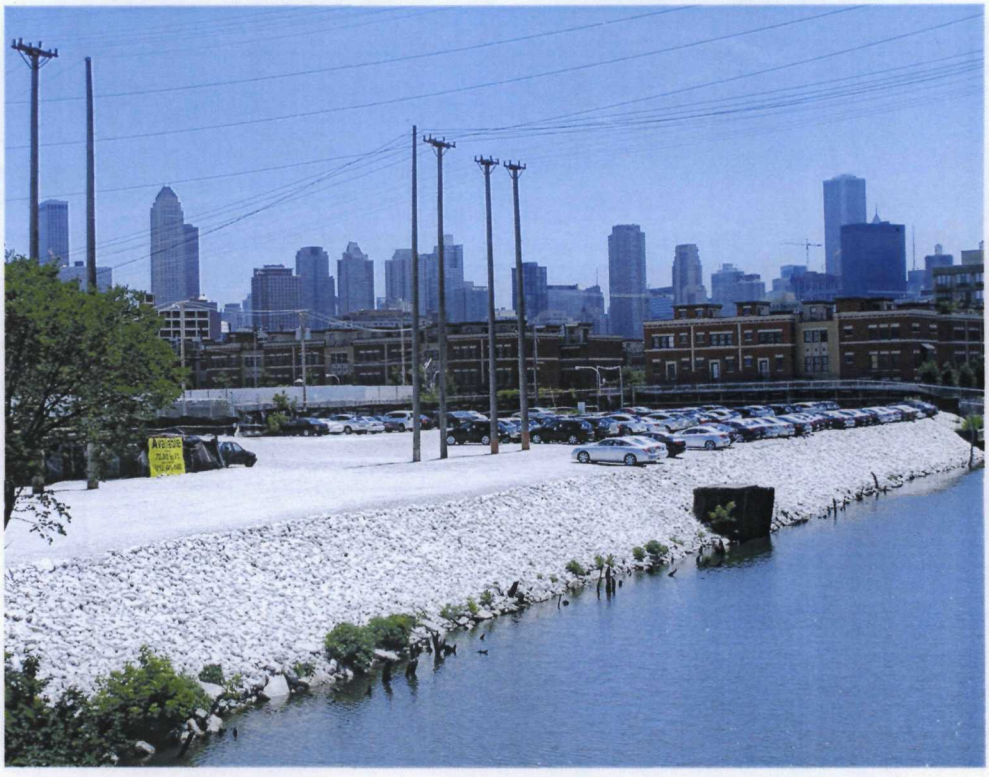
DATE: 7-2-07

TIME: 11:55

PHOTO BY:
Wesley King

DIRECTION: SE

COMMENTS: Photo taken from the Halsted bridge over the North branch canal. LaSalle-Chestnut parcel.



DATE: 7-2-07

TIME: 12:00

PHOTO BY:
Wesley King

DIRECTION: E

COMMENTS: Taken north of Coffee North vehicle is driving down Kingsbury (former). ComEd facility is seen in the picture with the Chicago Skyline in the background.

DATE: 7-2-07

TIME: 12:05

PHOTO BY:
Wesley King

DIRECTION: NE

COMMENTS: Taken near the SE corner of the LaSalle-Chestnut parcel. Photo of Hobbie st. White fence on left is the southern boundary of the ComEd parcel.

DATE: 7-2-07

TIME: 12:10

PHOTO BY:
Wesley King

DIRECTION: NW

COMMENTS:
Taken from the SE corner of the ComEd parcel. White fence is the eastern boundary of the ComEd parcel. In the background Cabrini-Green high rises can be seen.

DATE: 7-2-07

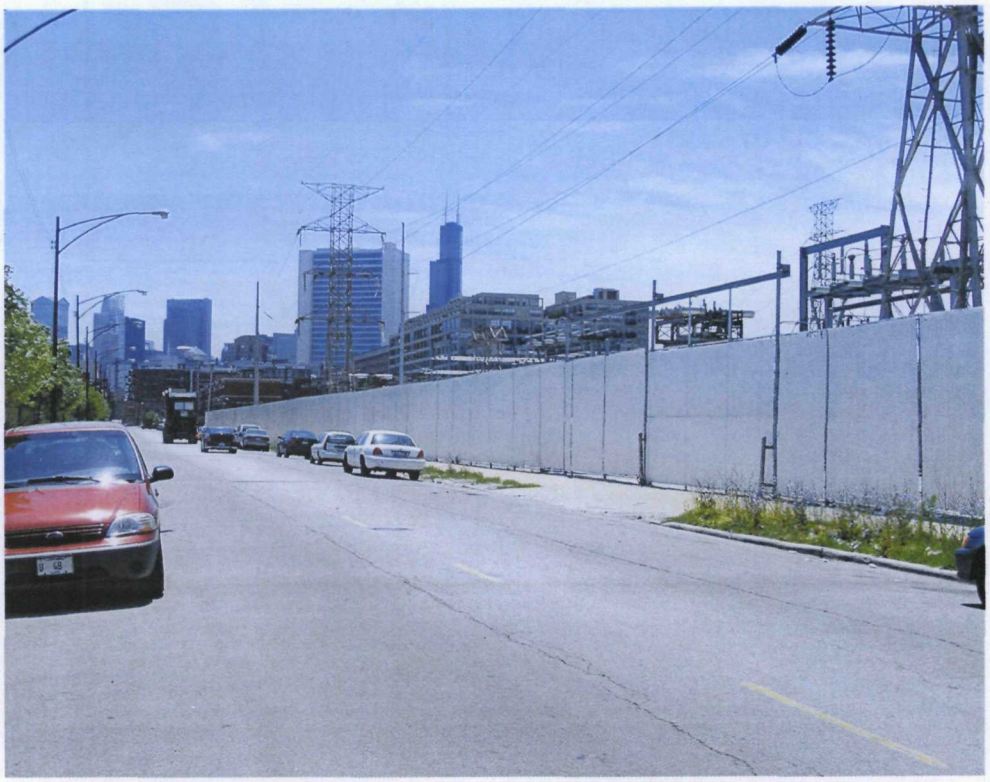
TIME: 12:15

PHOTO BY:
Wesley King

DIRECTION: SW

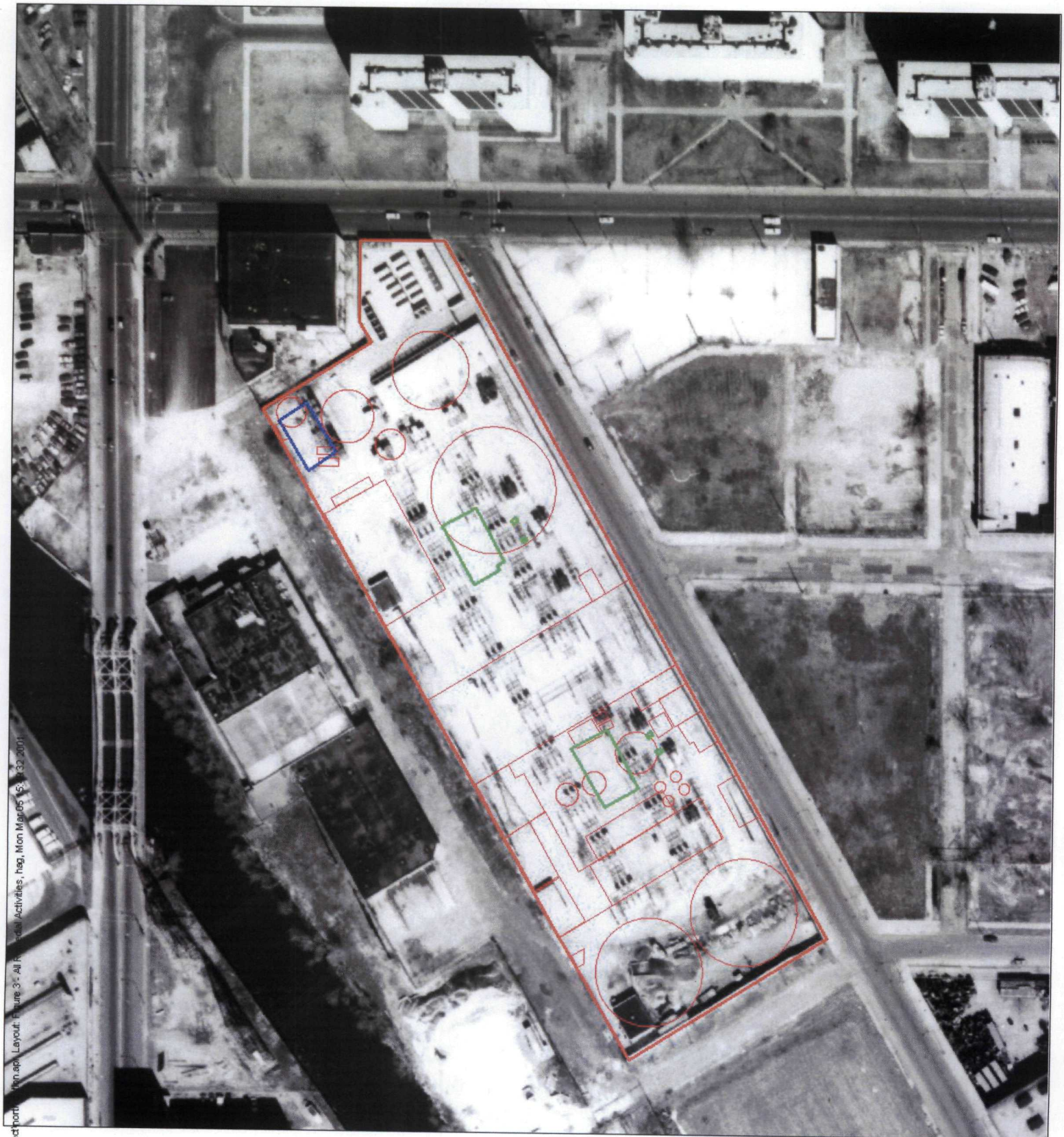
COMMENTS:
Taken from the SE corner of the ComEd parcel. White fence is the southern boundary of the ComEd parcel.

DATE: 7-2-07
TIME: 12:15
PHOTO BY: Wesley King
DIRECTION: South
COMMENTS: Taken near the NE corner of the ComEd parcel on Crosby St. White fence is the eastern boundary of ComEd parcel.



DATE: 7-2-07
TIME: 12:15
PHOTO BY: Wesley King
DIRECTION:
COMMENTS:

Figure 10
ComEd Parcel Remedial Activities (Barr Report, 1999)



Legend

- Peoples Gas Excavated Area
- Estimated Location of ComEd Remedial Activities
- Approximate Site Boundary
- Historical Features

N

50 0 50 100 150 Feet

Figure 3
Additional Remedial Activities
North Station
Former MGP Site
Chicago, Illinois

Appendix B

City of Chicago Groundwater Ordinance

CHICAGO GROUNDWATER ORDINANCE

In May 1997, the Chicago City Council passed a groundwater ordinance, set forth below, prohibiting the installation of new potable water supply wells. The purpose is to limit the potential for persons to be exposed to contaminants by ingesting groundwater. Since new potable wells are prohibited, groundwater contamination is not a potential source of exposure for the vast majority of sites in the city. Limiting the potential exposure pathways to those posed by ingesting or inhaling soil makes cleanups more practical and cost effective. Site owners enrolled in the Illinois Site Remediation Program still must test and report groundwater impacts from their site, however.

The City of Chicago and the Illinois Environmental Protection Agency have a memorandum of understanding which acknowledges the City's groundwater ordinance as an acceptable "institutional control" under the state's TACO guidelines.

* * * *

Municipal Code of Chicago, Illinois
Chapter 11-8 WATER SUPPLY AND DISTRIBUTION SYSTEMS*

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* **Editor's note:** Coun. J. 3-28-01, p. 55444, § 1, repealed Ch. 11-8, in its entirety, which pertained to water supply and distribution systems. Subsequently, Amend Coun. J. 11-28-01, p. 72895, § 1 added provisions designated as § 11-8-390. Former Ch. 11-8 (title) has been restored at the discretion of the editor to accommodate inclusion of provisions designated as 11-8-390. See the Code Comparative Table.

11-8-390 Potable water wells.
For purposes of this section, "potable water" is any water used for human consumption, including but not limited to water used for drinking, bathing, washing dishes, preparing foods and watering gardens in which produce intended for human consumption is grown. No groundwater well, cistern or other groundwater collection device installed after May 14, 1997, may be used to supply any potable water supply system, except at points of withdrawal by the City of Chicago or by a unit of local government pursuant to intergovernmental agreement with the City of Chicago.
(Added Coun. J. 11-28-01, p. 72895, § 1)